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10/657,160	09/09/2003	Emmanuel Marilly	Q77141	1014
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SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			DWIVEDI, MAHESH H	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/657,160 Examiner Mahesh H. Dwivedi	ART UNIT 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 05 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3,5-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3,5-13 and 15-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 09 September 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/5/2006 has been entered.

Response to Amendment

2. Receipt of Applicant's Amendment, filed on 03/05/2007, is acknowledged. The amendment includes the amending of claims 1 and 11, and the cancellation of claims 4 and 14.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-3, 5-10, and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The examiner specifically points to "device" as being directed towards nonstatutory subject matter.

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, function descriptive material *per se*.

Claim Rejections - 35 USC § 103

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6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3, 5-13, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Barkan et al.** (U.S. Patent 6,925,493) and in view of **Tunnicliffe et al.** (U.S. Patent 6,272,110).

8. Regarding claim 1, **Barkan** teaches a device comprising:

- A) processing means arranged so as to determine primary data representing a state of use of the network by at least one user who has made a service level agreement, or "SLA", with an operator of said network, from said management data (Column 2, lines 41-46, Column 4, lines 44-60); and
- B) then to compare said state of use with ancillary data representing said SLA, so as to determine an action to be undertaken in the event of the detection of at least one difference between said primary data and said ancillary data (Column 2, lines 41-46, Column 4, lines 44-60); and

E) wherein said processing means are arranged so as to adapt at least some of the proposals to modify the services and/or resources of said network according to tertiary data (Column 5, lines 30-34, Column 17, lines 35-54).

The examiner notes that Barkan teaches “**processing means arranged so as to determine primary data representing a state of use of the network by at least one user who has made a service level agreement, or "SLA", with an operator of said network, from said management data**” as “Using the present invention's solution, the ASP can provide timely and reliable reports to its customers on the service level delivered, compared with the service level agreed upon in the SLA. Another feature provided by the present invention is the calculation of penalties to be credited to the customer in case the targets have not been met” (Column 2, lines 41-46) and “This language contains formulas, wherein each formula describes how to compute some service-level value from measurements collected by the ASP. These measurements are usually collected from various tools that measure resources that the ASP uses to supply service to its customers. Each such formula, written in SLALOM, can be loaded into the server computer memory, and from there it may collect measurements from measurement tools, and subsequently calculate the service level. The results of these computations can be analyzed, saved and monitored. Furthermore these results can be used to generate various summaries and reports that are used to ensure the smooth maintenance of customer relations, contracts, resource allocation and system development. The system administrator does not have to know this language, yet it can be used with a very intuitive and easy to use user interface” (Column 4, lines 44-60). The examiner further notes that Barkan teaches “**then to compare said state of use with ancillary data representing said SLA, so as to determine an action to be undertaken in the event of the detection of at least one difference between said primary data and said ancillary data**” as “Using the present invention's solution, the ASP can provide timely and reliable reports to its customers on the service level delivered, compared with the service level agreed upon in the SLA. Another feature provided by the present invention is the calculation of penalties to be credited to the customer in case the targets have not been met” (Column 2, lines 41-46) and “This

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language contains formulas, wherein each formula describes how to compute some service-level value from measurements collected by the ASP. These measurements are usually collected from various tools that measure resources that the ASP uses to supply service to its customers. Each such formula, written in SLALOM, can be loaded into the server computer memory, and from there it may collect measurements from measurement tools, and subsequently calculate the service level. The results of these computations can be analyzed, saved and monitored. Furthermore these results can be used to generate various summaries and reports that are used to ensure the smooth maintenance of customer relations, contracts, resource allocation and system development. The system administrator does not have to know this language, yet it can be used with a very intuitive and easy to use user interface" (Column 5, lines 44-60). The examiner further notes that Barkan teaches "wherein said processing means are arranged so as to adapt at least some of the proposals to modify the services and/or resources of said network according to tertiary data" as "This component is responsible for processing the data in the SLA DB 32 and generating maps of the promised service level for a customer or a group of customers within a period of time or a time slot" (Column 5, lines 30-34) and "When the ASP industry becomes mainstream, most software applications will become commodities. For example, a company that wishes to implement a Human Resources application from PeopleSoft (<http://www.peoplesoft.com>) will be indifferent to which ASP provides it. The main difference between the offerings of different ASP's will be in their SLA's and their ability to execute their SLA--this is what customers will focus on in choosing their ASP's. By implementing Oblicore, the ASP will have a system that enables it to define its different resources in a single place. The ASP's sales staff will be able to easily tailor an SLA that suits the needs of each customer and charge more for higher level of service, without compromising the ASP's ability to meet the needs of other customers. The ASP may allow the customer to change some of the definitions in the SLA dynamically (for the right price) to accommodate the customer changing needs. Using Oblicore system, the ASP manager will be able to identify potential customers that can be offered higher levels of service and additional services" (Column 17, lines 35-54).

Barkan does not explicitly teach:

- C) said processing means being arranged in order to determine said action to be undertaken amongst an action group comprising a proposal to modify the SLA made between said user and said operator and/or a proposal to modify the services and/or resources of said network; and
- D) to adapt at least some of the SLA modification proposals according to said difference detected.

Tunnicliffe, however, teaches “**said processing means being arranged in order to determine said action to be undertaken amongst an action group comprising a proposal to modify the SLA made between said user and said operator and/or a proposal to modify the services and/or resources of said network**” as “the customer obtains predicted values for his bandwidth levels, for example, and this information is used automatically by his agent on his behalf to renegotiate the service level agreement” (Column 2, lines 42-46), and “**to adapt at least some of the SLA modification proposals according to said difference detected**” as “an agent reasons about an offer and either accepts, rejects or generates a counter-offer is represented by a negotiation model” (Column 6, lines 53-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe's** would have allowed **Barkan's** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claims 2 and 12, **Barkan** further teaches a device and method comprising:

- A) characterized in that said primary data represent a use of at least one service and/or of resources (Column 2, lines 41-46, Column 4, lines 44-60, Column 5, lines 35-47).

The examiner notes that **Barkan** teaches “**characterized in that said primary data represent a use of at least one service and/or of resources**” as “Using the present invention's solution, the ASP can provide timely and reliable reports to its

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customers on the service level delivered, compared with the service level agreed upon in the SLA. Another feature provided by the present invention is the calculation of penalties to be credited to the customer in case the targets have not been met" (Column 2, lines 41-46) and "This language contains formulas, wherein each formula describes how to compute some service-level value from measurements collected by the ASP. These measurements are usually collected from various tools that measure resources that the ASP uses to supply service to its customers. Each such formula, written in SLALOM, can be loaded into the server computer memory, and from there it may collect measurements from measurement tools, and subsequently calculate the service level. The results of these computations can be analyzed, saved and monitored. Furthermore these results can be used to generate various summaries and reports that are used to ensure the smooth maintenance of customer relations, contracts, resource allocation and system development. The system administrator does not have to know this language, yet it can be used with a very intuitive and easy to use user interface" (Column 4, lines 44-60).

Regarding claim 3, **Barkan** does not explicitly teach a device comprising:
A) characterized in that said processing means are arranged so as to adapt at least some of the proposals to modify the services and/or resources of said network according to at least one SLA modification proposal.

Tunnicliffe, however, teaches "**characterized in that said processing means are arranged so as to adapt at least some of the proposals to modify the services and/or resources of said network according to at least one SLA modification proposal**" as "an agent reasons about an offer and either accepts, rejects or generates a counter-offer is represented by a negotiation model" (Column 6, lines 53-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe's** would have allowed **Barkan's** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claim 5, **Barkan** does not explicitly teach a device comprising:

- A) characterized in that said processing means are arranged so as to determine at least some of the states of use in the form of a usage profile (SUP) in a chosen time interval, from management data corresponding to said time interval.

Tunnicliffe, however, teaches “**characterized in that said processing means are arranged so as to determine at least some of the states of use in the form of a usage profile (SUP) in a chosen time interval, from management data corresponding to said time interval**” as “the trends analyser is trained using historic logs of network traffic, allowing its neural network to learn expected network traffic behavioral patterns. Once trained the trends analyser is able to predict future traffic demand based on the current monitored traffic, which may be presented to the user graphically” (Column 5, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe’s** would have allowed **Barkan’s** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claim 6, **Barkan** further teaches a device comprising:

- A) characterized in that said processing means are arranged so as to determine an action to be undertaken from several states of use associated with different users or a state of use associated with a group of users (Column 5, lines 30-34, Column 17, lines 35-54).

The examiner further notes that **Barkan** teaches “**characterized in that said processing means are arranged so as to determine an action to be undertaken from several states of use associated with different users or a state of use associated with a group of users**” as “This component is responsible for processing the data in the SLA DB 32 and generating maps of the promised service level for a customer or a group of customers within a period of time or a time slot” (Column 5, lines

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30-34) and "When the ASP industry becomes mainstream, most software applications will become commodities. For example, a company that wishes to implement a Human Resources application from PeopleSoft (<http://www.peoplesoft.com>) will be indifferent to which ASP provides it. The main difference between the offerings of different ASP's will be in their SLA's and their ability to execute their SLA--this is what customers will focus on in choosing their ASP's. By implementing Oblicore, the ASP will have a system that enables it to define its different resources in a single place. The ASP's sales staff will be able to easily tailor an SLA that suits the needs of each customer and charge more for higher level of service, without compromising the ASP's ability to meet the needs of other customers. The ASP may allow the customer to change some of the definitions in the SLA dynamically (for the right price) to accommodate the customer changing needs. Using Oblicore system, the ASP manager will be able to identify potential customers that can be offered higher levels of service and additional services" (Column 17, lines 35-54).

Regarding claim 7, **Barkan** does not explicitly teach a device comprising:

- A) characterized in that said processing means are arranged so as to automatically initiate an SLA modification when at least one condition is satisfied.

Tunnicliffe, however, teaches "**characterized in that said processing means are arranged so as to automatically initiate an SLA modification**" as "the customer obtains predicted values for his bandwidth levels, for example, and this information is used automatically by his agent on his behalf to renegotiate the service level agreement" (Column 2, lines 42-46, Figure 1), and "**when at least one condition is satisfied**" as "traffic levels are only one example of an operations measurement that can be predicted and used for network management" (Column 3, lines 22-31, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe's** would have allowed **Barkan's** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claim 8, **Barkan** further teaches a device comprising:

- A) characterized in that said processing means are arranged so as to automatically initiate said SLA modification when it is associated with an increase in the tariff of the user less than a penalty representing the violation of the SLA by the user (Column 2, lines 41-46).

The examiner notes that **Barkan** teaches “**characterized in that said processing means are arranged so as to automatically initiate said SLA modification when it is associated with an increase in the tariff of the user less than a penalty representing the violation of the SLA by the user**” as “Using the present invention's solution, the ASP can provide timely and reliable reports to its customers on the service level delivered, compared with the service level agreed upon in the SLA. Another feature provided by the present invention is the calculation of penalties to be credited to the customer in case the targets have not been met” (Column 2, lines 41-46).

Regarding claim 9, **Barkan** further teaches a device comprising:

- A) characterized in that said processing means are arranged so as to make their determinations periodically (Column 9, lines 56-60).

The examiner notes that **Barkan** teaches “**characterized in that said processing means are arranged so as to make their determinations periodically**” as “Target period--a time interval to which the Target is related as a whole. In other words --for each Rule, once every Target Period, the provided service level is calculated and checked against the Target to calculate deviations from the agreed and/or Penalties” (Column 9, lines 56-60).

Regarding claim 10, **Barkan** further teaches a device comprising:

- A) A device for managing a communications network (N), characterized in that it comprises a processing device according to claim 1 (Column 5, lines 30-53).

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Regarding claim 11, **Barkan** teaches a method comprising:

- A) determining primary data representing a state of use of the network by at least one user who has made a service level agreement, or "SLA", with an operator of said network, from said management data (Column 2, lines 41-46, Column 4, lines 44-60); and
- B) then comparing said state of use with ancillary data representing said SLA, so as to determine an action to be undertaken in the event of the detection of at least one difference between said primary data and said ancillary data (Column 2, lines 41-46, Column 4, lines 44-60);
- E) wherein said action to be undertaken is performed by a processing means of a device (Column 5, lines 30-53); and
- F) wherein at least some of the proposals to modify the services and/or resources of said network are adapted according to tertiary data (Column 5, lines 30-34, Column 17, lines 35-54).

The examiner notes that **Barkan** teaches "**determining primary data representing a state of use of the network by at least one user who has made a service level agreement, or "SLA", with an operator of said network, from said management data**" as "Using the present invention's solution, the ASP can provide timely and reliable reports to its customers on the service level delivered, compared with the service level agreed upon in the SLA. Another feature provided by the present invention is the calculation of penalties to be credited to the customer in case the targets have not been met" (Column 2, lines 41-46) and "This language contains formulas, wherein each formula describes how to compute some service-level value from measurements collected by the ASP. These measurements are usually collected from various tools that measure resources that the ASP uses to supply service to its customers. Each such formula, written in SLALOM, can be loaded into the server computer memory, and from there it may collect measurements from measurement tools, and subsequently calculate the service level. The results of these computations can be analyzed, saved and monitored. Furthermore these results can be used to generate various summaries and reports that are used to ensure the smooth

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maintenance of customer relations, contracts, resource allocation and system development. The system administrator does not have to know this language, yet it can be used with a very intuitive and easy to use user interface" (Column 4, lines 44-60). The examiner further notes that Barkan teaches "**then comparing said state of use with ancillary data representing said SLA, so as to determine an action to be undertaken in the event of the detection of at least one difference between said primary data and said ancillary data**" as "Using the present invention's solution, the ASP can provide timely and reliable reports to its customers on the service level delivered, compared with the service level agreed upon in the SLA. Another feature provided by the present invention is the calculation of penalties to be credited to the customer in case the targets have not been met" (Column 2, lines 41-46) and "This language contains formulas, wherein each formula describes how to compute some service-level value from measurements collected by the ASP. These measurements are usually collected from various tools that measure resources that the ASP uses to supply service to its customers. Each such formula, written in SLALOM, can be loaded into the server computer memory, and from there it may collect measurements from measurement tools, and subsequently calculate the service level. The results of these computations can be analyzed, saved and monitored. Furthermore these results can be used to generate various summaries and reports that are used to ensure the smooth maintenance of customer relations, contracts, resource allocation and system development. The system administrator does not have to know this language, yet it can be used with a very intuitive and easy to use user interface" (Column 5, lines 44-60). The examiner further notes that Barkan teaches "wherein at least some of the proposals to modify the services and/or resources of said network are adapted according to tertiary data" as "This component is responsible for processing the data in the SLA DB 32 and generating maps of the promised service level for a customer or a group of customers within a period of time or a time slot" (Column 5, lines 30-34) and "When the ASP industry becomes mainstream, most software applications will become commodities. For example, a company that wishes to implement a Human Resources application from PeopleSoft (<http://www.peoplesoft.com>) will be indifferent to which ASP

provides it. The main difference between the offerings of different ASP's will be in their SLA's and their ability to execute their SLA--this is what customers will focus on in choosing their ASP's. By implementing Oblicore, the ASP will have a system that enables it to define its different resources in a single place. The ASP's sales staff will be able to easily tailor an SLA that suits the needs of each customer and charge more for higher level of service, without compromising the ASP's ability to meet the needs of other customers. The ASP may allow the customer to change some of the definitions in the SLA dynamically (for the right price) to accommodate the customer changing needs. Using Oblicore system, the ASP manager will be able to identify potential customers that can be offered higher levels of service and additional services" (Column 17, lines 35-54).

Barkan does not explicitly teach:

- C) said action to be undertaken is determined in an action group comprising a proposal to modify the SLA made between said user and said operator and/or a proposal to modify the services and/or resources of said network; and
- D) at least some of the SLA modification proposals are adapted according to said difference detected.

Tunnicliffe, however, teaches "**said action to be undertaken is determined in an action group comprising a proposal to modify the SLA made between said user and said operator and/or a proposal to modify the services and/or resources of said network**" as "the customer obtains predicted values for his bandwidth levels, for example, and this information is used automatically by his agent on his behalf to renegotiate the service level agreement" (Column 2, lines 42-46), "**at least some of the SLA modification proposals are adapted according to said difference detected**" as "an agent reasons about an offer and either accepts, rejects or generates a counter-offer is represented by a negotiation model" (Column 6, lines 53-55), and "wherein said action to be undertaken is performed by a processing means of a device" as "Preferably, said communications network comprises at least two agents, each agent comprising a computer system provided with at least one communication link to another agent, said computer system being arranged to accept the results of the comparison

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and further comprising information about the threshold value, a set of criteria and a set of actions" (Column 2, lines 23-30) and "The operator is able to predict short term future demand on the network. This can allow the operator, or automatic process (such as an agent), to pro-actively reconfigure resources to cope with any increase in traffic before services become affected" (Column 4, lines 19-24)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe's** would have allowed **Barkan's** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claim 13, **Barkan** does not explicitly teach a method comprising:

A) characterized in that at least some of the proposals to modify the services and/or resources of said network (N) are adapted according to at least one proposal to modify the SLA.

Tunnicliffe, however, teaches "**characterized in that at least some of the proposals to modify the services and/or resources of said network (N) are adapted according to at least one proposal to modify the SLA**" as "an agent reasons about an offer and either accepts, rejects or generates a counter-offer is represented by a negotiation model" (Column 6, lines 53-55).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe's** would have allowed **Barkan's** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claim 15, **Barkan** does not explicitly teach a method comprising:

A) characterized in that at least some of the states of use are determined in the form of a usage profile (SUP) in a chosen time interval, from management data corresponding to said time interval.

Tunnicliffe, however, teaches “**characterized in that at least some of the states of use are determined in the form of a usage profile (SUP) in a chosen time interval, from management data corresponding to said time interval**” as “the trends analyser is trained using historic logs of network traffic, allowing its neural network to learn expected network traffic behavioral patterns. Once trained the trends analyser is able to predict future traffic demand based on the current monitored traffic, which may be presented to the user graphically” (Column 5, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe's** would have allowed **Barkan's** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claim 16, **Barkan** further teaches a method comprising:

A) characterized in that some actions to be undertaken are determined from several states of use associated with different users or a state of use associated with a group of users (Column 5, lines 30-34, Column 17, lines 35-54).

The examiner further notes that **Barkan** teaches “**characterized in that some actions to be undertaken are determined from several states of use associated with different users or a state of use associated with a group of users**” as “This component is responsible for processing the data in the SLA DB 32 and generating maps of the promised service level for a customer or a group of customers within a period of time or a time slot” (Column 5, lines 30-34) and “When the ASP industry becomes mainstream, most software applications will become commodities. For example, a company that wishes to implement a Human Resources application from PeopleSoft (<http://www.peoplesoft.com>) will be indifferent to which ASP provides it. The main difference between the offerings of different ASP's will be in their SLA's and their ability to execute their SLA--this is what customers will focus on in choosing their ASP's. By implementing Oblicore, the ASP will have a system that enables it to define its different resources in a single place. The ASP's sales staff will be able to easily tailor an

SLA that suits the needs of each customer and charge more for higher level of service, without compromising the ASP's ability to meet the needs of other customers. The ASP may allow the customer to change some of the definitions in the SLA dynamically (for the right price) to accommodate the customer changing needs. Using Oblicore system, the ASP manager will be able to identify potential customers that can be offered higher levels of service and additional services" (Column 17, lines 35-54).

Regarding claim 17, **Barkan** does not explicitly teach a method comprising:

- A) characterized in that an SLA modification is instituted automatically when at least one condition is satisfied.

Tunnicliffe, however, teaches "**characterized in that an SLA modification is instituted automatically when at least one condition is satisfied**" as "the customer obtains predicted values for his bandwidth levels, for example, and this information is used automatically by his agent on his behalf to renegotiate the service level agreement" (Column 2, lines 42-46, Figure 1), and "**when at least one condition is satisfied**" as "traffic levels are only one example of an operations measurement that can be predicted and used for network management" (Column 3, lines 22-31, Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Tunnicliffe's** would have allowed **Barkan's** to provide a simple and easy to use method to manage a customer network with different customers having different priorities and requirements, as noted by **Tunnicliffe** (Column 1, lines 37-41).

Regarding claim 18, **Barkan** further teaches a method comprising:

- A) characterized in that said SLA modification is instituted when it is associated with an increase in the tariff of the user less than a penalty representing the violation of the SLA by the user (Column 2, lines 41-46).

The examiner notes that **Barkan** teaches "**characterized in that said SLA modification is instituted when it is associated with an increase in the tariff of the user less than a penalty representing the violation of the SLA by the user**" as

"Using the present invention's solution, the ASP can provide timely and reliable reports to its customers on the service level delivered, compared with the service level agreed upon in the SLA. Another feature provided by the present invention is the calculation of penalties to be credited to the customer in case the targets have not been met" (Column 2, lines 41-46).

Regarding claim 19, **Barkan** further teaches a method comprising:

- A) characterized in that the determinations are made periodically (Column 9, lines 56-60).

The examiner notes that **Barkan** teaches "**characterized in that the determinations are made periodically**" as "Target period--a time interval to which the Target is related as a whole. In other words --for each Rule, once every Target Period, the provided service level is calculated and checked against the Target to calculate deviations from the agreed and/or Penalties" (Column 9, lines 56-60).

Regarding claim 20, **Barkan** further teaches a device comprising:

- A) Use of the method, processing device and management device according to claim 1 in networks chosen from a group comprising Internet (IP), ATM, Frame Relay, SDH and WDM networks (Column 3, lines 66-67-Column 4, lines 1-4).

Response to Arguments

9. Applicant's arguments filed on 02/05/2007 have been fully considered but they are not persuasive.

The examiner wishes to state that applicants arguments filed on 02/05/2007 have already been addressed from the advisory action mailed on 02/12/2007.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,893,905 issued to **Main et al.** on 13 April 1999. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and alert service level agreement discrepancies).

U.S. Patent 6,681,232 issued to **Sistanizadeh et al.** on 20 January 2004. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

U.S. PGPUB 2003/0229759 issued to **Doyle et al.** on 11 December 2003. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

U.S. PGPUB 2002/0064149 issued to **Elliott et al.** on 30 May 2002. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

U.S. PGPUB 2002/0152297 issued to **Lebourg et al.** on 17 October 2002. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

U.S. PGPUB 2002/0143920 issued to **Dev et al.** on 03 October 2002. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

U.S. Patent 7,099,936 issued to **Chase et al.** on 29 August 2006. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

U.S. Patent 7,007,082 issued to **Harasawa** on 28 February 2006. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

U.S. Patent 6,792,459 issued to **Elnozahy et al.** on 14 September 2004. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

Article entitled "SERVICE LEVEL AGREEMENTS: A MAIN CHALLENGE for Next Generation Networks", by **Marilly et al.**, dated 06/15/2001. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

Article entitled "PRO-ACTIVE SLA ASSURANCE FOR NEXT GENERATION NETWORK", by **Marilly et al.**, dated 03/06/2002. The subject matter disclosed therein

is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

Article entitled "Requirements for Service Level Agreement Management", by **Marilly et al.**, dated 09/06/2002. The subject matter disclosed therein is pertinent to that of claims 1-3, 5-13, and 15-20 (e.g., methods to monitor and overlook service level management).

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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May 17, 2007


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